DECONSTRUCTING DAVID LANG'S THE ANVIL CHORUS

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Deconstructing David Lang's *The Anvil Chorus*

by

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Usually, when a piece of music is taken out of context, that is, when it is learned and performed without studying the piece, the composer, the musical genre, or the historical significance, the understanding of it for the performer is narrow and limited and the performance is less than ideal. This leads to a substandard realization of the music. Contrarily, a musician should integrate research with the learning process as to enhance the comprehensive understanding of the piece, which ultimately results in a high level of performance. This idea is important for the complex and extensive musical repertoire of the twentieth and twenty-first centuries. David Lang's solo percussion work, *The Anvil Chorus*, is case and point.

Lang was born in 1957 into an inartistic family. His interest in composition, and indeed classical music, was sparked at the age of nine when he was shown a film performance of Shostakovich's Symphony No. 1 by Bernstein with the New York Philharmonic. The film brought forth the fact that Shostakovich was only nineteen years old when he wrote the symphony. Lang thought, "I have ten years and I could do it." Consequently, from that moment on, he did everything he could to nurture his ambition for composition. Lang stated in an interview, "my family was tremendously unartistic. I was not allowed to have music lessons when I was a kid, because my older sister had music lessons, and it had been a horrible failure." However, his persistent interest in composition forced his parents to find a private teacher, Henri Lazarof at UCLA. This marked the beginning of Lang's formal musical training in composition.[1]

Lang had a natural interest for science and mathematics as the son of a doctor. As a result, he viewed music from a microscopic perspective. His interest in music was a scientific "take it apart, from the inside of a car" kind of interest. Lang stated, "I started by going through music counting, by looking at things and taking them apart, and that's why, when I was in high school and heard the music of Philip Glass and Steve Reich, it really made so much sense to

[1] Andrew Bliss, *David Lang: Deconstructing a Constructivist Composer*. (Ann Arbor, MI: ProQuest, 2008), p. 5.

me." This microscopic perspective permeates his compositions.[2] But, Lang wants to take it a step further. He does this by introducing rhythmic or melodic patterns with immediate disruptions that make way for other patterns. It is the disruptions that make Lang's music his own, as compared to the music of Reich or Glass where there are drone-like textures and continuous ostinatos that often shift subtlety over time. In a way, Lang tests the audience by presenting cyclic and interruptive ideas in his works. These ideas are usually mathematical in formulation, as mentioned above.

The Anvil Chorus was written in 1991 for renowned percussionist, Steven Schick. The Fromm Foundation at Harvard University commissioned the piece and Schick gave the premiere performance on May 13, 1991 during the Bang-on-a-Can Festival in New York, which was founded by Lang and colleagues Julia Wolfe and Michael Gordon.[3][4] The composer's notes for the piece are below:

> When percussionist Steve Schick asked me to write him a solo piece I wanted to do something that showed percussion's connection to real life activities. I didn't want to work with the pretty instruments, like vibraphone or chimes, that were invented so that percussionists could play politely with other musicians. I wanted to write a piece that reminded the listener of the glorious history of percussion – that since the beginning of time people have always banged on things as a result of their professions.
>
> Then I remembered that I had once read a book on the history of blacksmithing, and I had become particularly interested in how medieval blacksmiths used song to help them in their work. Although small jobs could be accomplished by individual smiths, larger jobs created an interesting problem – how could several smiths hammer on a single piece of metal without getting in each other's way? Smiths solved this problem by singing songs together which would control the beat patterns of the hammers. There was a different song for each number of participating blacksmiths — obviously, a song that allowed for three hammer strokes would be confusing and even dangerous if used to coordinate four smiths.

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[2] Andrew Bliss, *David Lang: Deconstructing a Constructivist Composer*. (Ann Arbor, MI: ProQuest, 2008), p. 14.
[3] David Lang, *The Anvil Chorus.* (New York: G. Schirmer, 1991).
[4] Steven Schick, *A Percussionist's Art: Same Bed, Different Dreams*. (Rochester, NY: University of Rochester, 2006), p. 26.

> My solo percussion piece *The Anvil Chorus* also uses a "melody" to control various beat patterns. The "melody" is played on resonant junk metals of the percussionist's choosing, and, by adding certain rules, it triggers an odd accompaniment of non-resonant junk metals, played both by hand and by foot.[5]

The blacksmiths devised a system of counting combined with a meticulous internal pulse and pre-determined beat patterns to work on a project. The songs they sang changed to accommodate the number of blacksmiths working. In this particular composition, the idea of multiple blacksmiths working on a project is downsized to only one solo percussionist responsible for all components of the project.[6] Schick described it:

> A single percussionist plays the part of many blacksmiths by performing several kinds of rhythmic material in several different speeds. The different rhythms and speeds create waves of pulsation: they cycle, overlap, and compete; the ebb and flow of these pulse cycles provides the genesis of large-scale sense in *The Anvil Chorus*.[7]

Schick and Lang's collaboration developed the piece over time. What we have today is a written and oral tradition.[8] Following the first performances, they tweaked the instrument and mallet choices, which resulted in a "reasonably fixed version… by the time the piece was first recorded in 1993."[9] However, instrumentation and set-up choices are crucial to the success of the piece.

The Anvil Chorus is scored technically for thirteen idiophones and one membranophone. Specifically, the score notates three major groups: 1) three resonant metals to be played with the hands, 2) four non-resonant metals to be played with the hands, and 3) four foot-operated non-resonant metals – junk metals. There are also two wood blocks and one kick drum (bass drum) notated in the score. The piece is labeled as open or free instrumentation since no specific instruments are listed, only guidelines. Therefore, it is up to the performer to choose the

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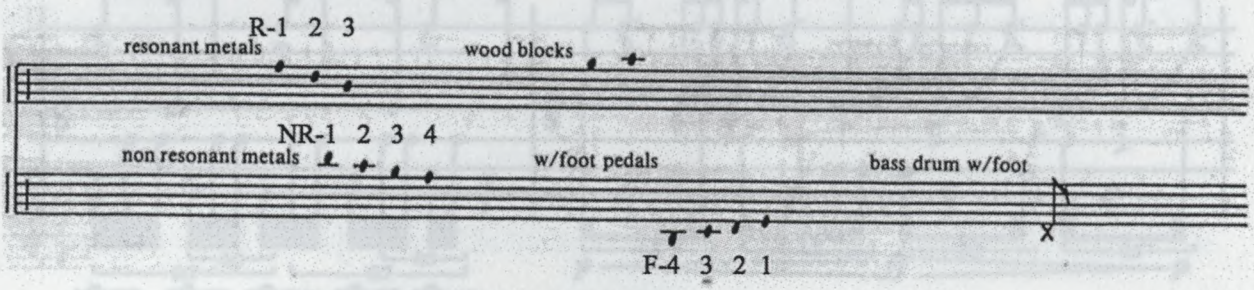
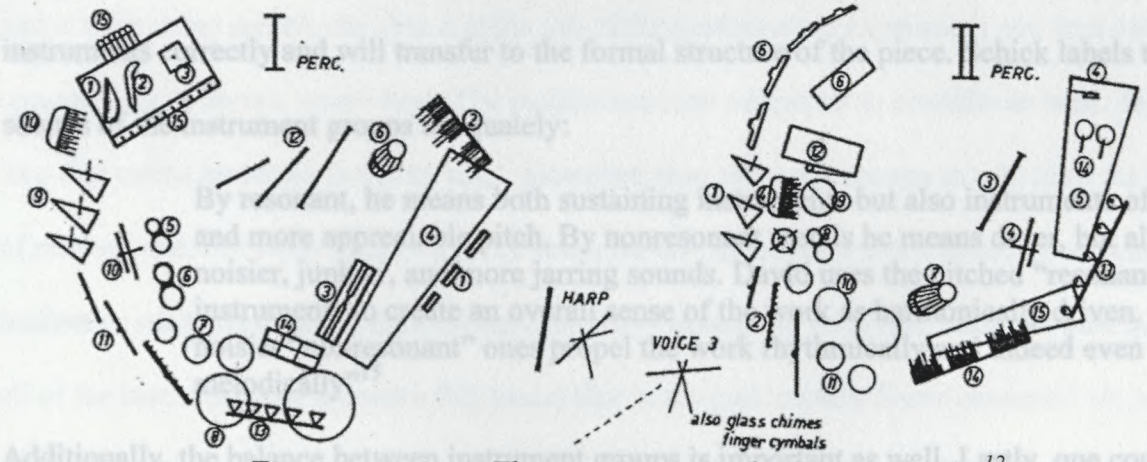
[5] David Lang, "David Lang – The Anvil Chorus (1991)" from MusicSalesClassical.com, Internet; accessed 23 Aug., 2013.
[6] Steven Schick, *A Percussionist's Art: Same Bed, Different Dreams*. (Rochester, NY: University of Rochester, 2006), p. 26.
[7] Ibid.
[8] Ibid., p. 30.
[9] Ibid., p. 31.

INSTRUMENTS REQUIRED:



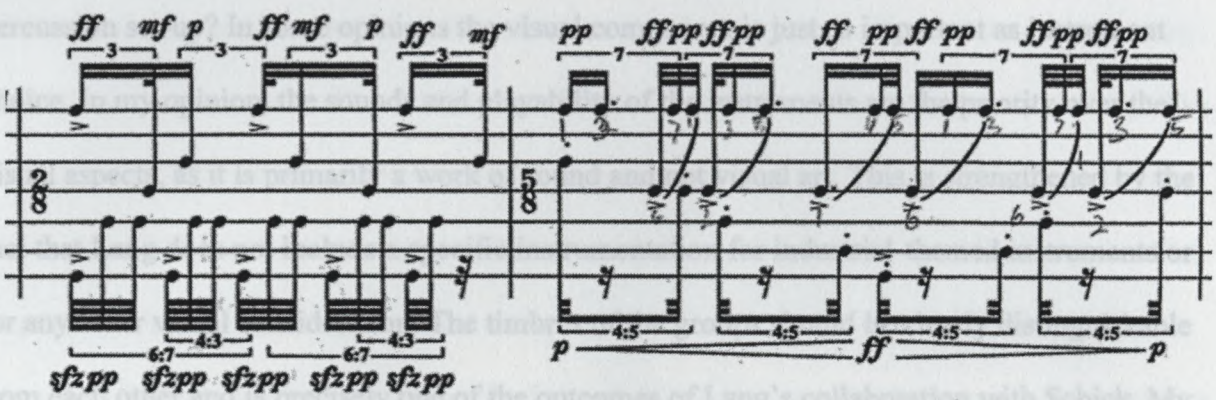
Instrument Requirements and Notation (with labels)

instruments. Schick defines this type of music as second-generation percussion works.[10] These second-generation compositions are "less concerned with the quantity of sounds [like the first-generation works] and more concerned with their qualities."[11] Among the first-generation pieces are Luciano Berio's *Circles* and Karlheinz Stockhausen's *Zyklus*, both of which include a substantial percussion set-up for over twenty specific instruments for one percussionist – an orchestra of instruments for one person. This contrasts with second-generation pieces such as Michael Gordon's *XY*, Brian Ferneyhough's *Bone Alphabet*, Vinko Globokar's *Toucher*, and



First generation – The massive set-up for Berio's Circles[12]

[10] Ibid., p. 25.
[11] Ibid., p. 24.
[12] Luciano Berio, *Circles* (New York City, New York: Harcourt, Brace, 1960)



Second generation – Seven instruments for Ferneyhough's Bone Alphabet[13]

Iannis Xenakis's *Psappha* that all feature some element of free instrumentation and a much smaller list of instruments. In *The Anvil Chorus*, the open instrumentation is actually deceiving because one does want a specific palette of timbres. As Schick said, "the illusion of freedom exists until you understand the piece."[14] The formal layout and the rhythmic phrases in the piece should be audible by performer and audience but the clarity comes from the right instrument choice. If chosen incorrectly, the tone qualities will blend with one another and the compositional effects will be lost. There is clarity and unity in each group if one chooses the instruments correctly and will transfer to the formal structure of the piece. Schick labels the sounds of the instrument groups adequately:

> By resonant, he means both sustaining instruments but also instruments of clearer and more appreciable pitch. By nonresonant metals he means dryer, but also noisier, junkier, and more jarring sounds. David uses the pitched "resonant" instruments to create an overall sense of the work as harmonically driven. The noisier "nonresonant" ones propel the work rhythmically and indeed even melodically"[15]

Additionally, the balance between instrument groups is important as well. Lastly, one could even consider the look of the set-up as well: will it convey an industrial aura or just a standard

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[13] Brian Ferneyhough, *Bone Alphabet* (London: Peters Edition, Ltd., 1995)
[14] Steven Schick, *A Percussionist's Art: Same Bed, Different Dreams*. (Rochester, NY: University of Rochester, 2006), p. 26.
[15] Ibid., p. 31.

percussion set-up? In some opinions the visual component is just as important as instrument choice. In my opinion, the sounds and playability of the instruments are the priority over the visual aspects, as it is primarily a work of sound and not visual art. This is strengthened by the fact that Lang does not include a specific instrumentation for industrial-themed instruments or for any other visual consideration. The timbres of the groups should be clearly distinguishable from each other and is precisely one of the outcomes of Lang's collaboration with Schick. My personal goal is to be able to execute the piece as successfully as I can without sacrificing the different tone qualities and playability. However, it is likely that the visual aspect can be just as powerful and important in performance as a result of the sonic choices.

Schick's personal instrumentation for the three major groups includes: three steel pipes of relatively pure pitch, four brake drums, and two cowbells and two tam-tams. Instruments can vary between a wide range of sounds though. The metals could include metal pipes, mixing bowls, cast-iron pots, hubcaps, metal plates, saw blades, opera gongs, hi-hat cymbals, propane tanks, trash cans, sixxen, etc., but it is the job of the performer to experiment and find out which combination of metals works best. The mallets used are important to consider as well. The score lists that chime hammers are to be used. However, they are cumbersome to use, limit the fluidity of motion, and ultimately creates a lot of stress on the performer's arms. Ideally, one wants mallets or sticks that will be light enough yet heavy enough to get a full, beautiful tone quality on all of the instruments or at least a full sound like in the junk metals. Some examples are snare drum sticks, timpani mallets, and xylophone mallets. Likewise, with the foot metals, hard felt, plastic, or wood may work. Depending on the instrument choices, some mallets may or may not be suitable. Just like with the instrument choices, the performer must experiment with mallet choice to find the ideal and practical implement.

Once the instruments are chosen, the next problem is set-up. The instrument set-up for multiple percussion pieces like this is crucial for success and must be considered carefully. The performer must formulate a physical layout of the instruments that will suit his or her technical needs as well as find instruments that will satisfy the composer's sonic specifications. Another important thing to consider is the trust in the set-up. When it comes down to it, the performer should be focusing on the music being performed. If not, "the trust in the set-up is diverted to a focus in nonmusical worries: unsecured instruments, audience distraction, extraneous noise, or memory errors."[16] In *The Anvil Chorus*, the instrument choice will dictate the set-up for better or for worse. Prodding a layer further, both of those aspects will affect the realization of the music. Perhaps starting with the size of the set-up is a priority. Regardless, throughout the learning process the performer should view the instrument set-up and even instrument choice as a work in progress, but the entire score should be checked thoroughly before a final set-up is decided. However, having a relatively compact set-up is in the performer's favor because of the fast transitions between the hand-metals and wood blocks. Lang spoke regarding two contrasting set-ups once on a trip in Moscow: "the first performer utilized saw blades and steel beams while the second one employed small metal discs and pipes in a set-up that was approximately one foot square in diameter."[17] Both were successful and required different methods for successful execution.

Sheet music arrangement, while a small detail, is still essential for success. This is not absolutely necessary if the piece is memorized, but important nonetheless. It is best to make large copies of the music and to cut, copy, and paste multiple pages onto a large piece of cardboard. Doing this eliminates difficult and/or impossible page turns and allows the performer

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[16] Matthew Coleman, *Instrument Design in Selected Works for Solo Multiple Percussion.* (Ann Arbor, MI: ProQuest, 2012), p. 2.
[17] Colin Tribby and Alex Postelnek, "David Lang's The Anvil Chorus," Percussive Notes 45.1 (2007), p. 67.

to focus more on the music. Rewriting measures 155-198 by rhythmic reduction (aka notating only the note changes) is also highly recommended, as it is much easier to process the basic material. (See page 21 for excerpt) Furthermore, marking the score with pencil and various highlighters to delineate formal ideas, sections, important lines, changes, and patterns is important and keeps the eye focused amongst the mass of black note-heads.

There are a few guidelines for the set-up for the top layer of instruments, the resonant metals, non-resonant metals, and wood blocks. No matter what instruments are chosen, the idea is to have the resonant metals as close as possible with a flat playing surface and around one and a half inch beating spots. This enables a higher rate of accuracy for faster passages. Additionally, the tone quality should not be sacrificed in any fashion. The wood blocks should be positioned close together with a flat playing surface and, if possible, should be located above the three resonant metals for quick access. Again, this assists in a higher rate of accuracy in the faster passages. Also, the positioning of these instruments (for the right hand) should allow for minimal arm motion front to back and side to side. The non-resonant metals (for the left hand) should also have a similar set-up and be located to the left of the resonant metals and wood blocks. They should be close together with a flat playing surface approximately at the same height as the resonant metals. As with the right hand instruments, the idea is to position them so there is minimal arm motion between the metals. Overall, one wants all of these instruments to remain still as much as possible in order for the best possible note accuracy. Using adhesives of any kind or foam may be necessary to facilitate this.

Of the bottom staff of instruments, the foot-operated non-resonant metals and the kick drum are the trickiest to manage. Like with the upper layer of instruments, the ideal set-up is the one that will position all five instruments close together with the pedals being a comfortable

distance away for the feet for quick and easy access. One could have five pedals. Or, seven pedals could work: "Kristiansen's solution to spacious or awkward pedal placement actually involves adding more pedals to the set-up," but it would present another problem, "it would be challenging to find enough pedals to consistently rehearse the piece, and dividing all other pedals around a centralized bass drum pedal would frustrate sections with recurring notes on bass drum amid varying notes on other pedals."[18] Furthermore, these bottom instruments and the pedals must be securely mounted. A solution is to construct a pedal platform that could "consist of a sheet of plywood with a raised strip attached to it for the pedals to connect. The remaining metals could be attached to a table, which could then be placed on top of the pedal platform."[19] Finally, if the performer chooses to stand, the bass drum facing the rear and close to the other pedals might work out better for quick shifts. The combination of instrument choice and set-up considerations makes for unlimited possibilities with a wide range of timbres and playability. It is up to the performer to decide which sacrifices will be made and ultimately the degree of success of the performance.

My set-up includes one-inch copper pipes of graduated pitch suspended with string and fishing line through eye hooks and resting on foam through the nodal points on a piece of plywood. The wood blocks in my set-up are two different-sized LP jam blocks that are mounted above the pipes via a threaded rod in the plywood between the pipes. The non-resonant metals are four mixing bowls of varying pitch that are placed upside-down next to the plywood

[18] Matthew Coleman, *Instrument Design in Selected Works for Solo Multiple Percussion*. (Ann Arbor, MI: ProQuest, 2012), p. 21.
[19] Colin Tribby and Alex Postelnek, "David Lang's The Anvil Chorus," Percussive Notes 45.1 (2007), p. 67.

My set-up as of November 6, 2013 (See Appendix for more pictures)

contraption. All of this is placed on top of a large table held up by an X-stand/keyboard stand with a carpet underneath to prevent sliding. The pedal-operated instruments consist of two trashcan lids, a large trash can, and an industrial sized food can. The foot metals are mounted directly onto the metals except for the food can, which is held by a snare-stand claw. The two inner foot metals are clamped down to a piece of plywood propped up against the keyboard stand. The pedals are situated with two pedals for my left foot and two pedals and the kick drum for my right foot. I also have a timpani stool to sit on as to eliminate unnecessary difficulties.

This current set-up has changed throughout the learning process and even still requires attention in order to allow for easier execution of the piece. I chose my specific instruments from a list of instruments that have become standard performance practice. The LP Jam Blocks are easy to mount and are extremely durable compared to normal wood blocks and still have a good

tone to them. The copper pipes produce a clear, resonant, and sustained pitch capable of carrying the melody while contrasting with the non-resonant metals. The mixing bowls, while presenting some difficulty with beating spots because of their varying depths and widths, produce the junkier, dryer sounds that Lang wants. The foot pedal metals were the trickiest. However, upon discovering specific trashcans and food cans, I found them to be ergonomic for the set-up and to also fulfill the maximum junk-like sound concept.

Lang wrote that while his music is "readily accessible to the ear, [they] are derived from highly mathematical and intensely detailed formal structures." His music is not about "a sound or style or tonality, but rather mechanical things about how pieces are structured."[20] It is worth noting that his music often features "characteristics inspired by his love of rock music: a persistent 'groove,' amplified instruments, and clear sectional form."[21] There are compositional devices in his music, including *The Anvil Chorus*, that point toward the mechanical aspect of composition – they drive his formal structure: 1) Lang uses metrical superimposition in which he tries to shift to listener's perception of the beat.[22] In metrical superimposition the tempo stays the same, but the rhythmic values layered in throws off the beat. This is unlike metric modulation where the time signature and tempos change. In *The Anvil Chorus*, Lang uses metrical superimposition by using only duple subdivisions – no triplet subdivisions. 2) Lang also uses repetition of thematic materials within sections and in contrasting sections. 3) Especially in *The Anvil Chorus*, Lang uses the repetition of rhythms to create an expectation and also breaks these expectations by introducing other rhythms or completely new sections. Some of these broken expectations include rhythmic diminution, where he reduces the number of notes or beats in a phrase. 4) He also uses cyclical substitution in his compositions where one "replaces one meter

[20] Andrew Bliss, *David Lang: Deconstructing a Constructivist Composer*. (Ann Arbor, MI: ProQuest, 2008), p. 17.
[21] Ibid., p. 2.
[22] Ibid., p. 4.

or group of notes for another [which] results in a systematic series that includes all of the possible permutations of the two contrasting figures." 5) Rhythmic displacement, while similar to metrical superimposition, deals with rhythmic cells on a smaller level. This is where Lang gradually displaces a rhythmic figure by a certain rhythmic value in each subsequent iteration.[23] Other compositional ideas found in *The Anvil Chorus* include the use of palindromes and additive phrases where he takes a rhythmic phrase and adds an x amount of measures that functions as a variation or development of the original phrase. These compositional elements form the nuts and bolts of Lang's mechanical and mathematical writing style. They help delineate the formal structure as well.

On a large formal scale, the piece can be interpreted as several different forms: a modified sonata form as stated by Colin Tribby and Alex Postelnek, modified rondo form with a coda as stated by Kevin Lewis, or chain form with six different sections with and without interlude as stated by Thomas Roland and Andrew Bliss, respectively.[24,25,26,27] After extensive analysis, the Roland analysis fits the piece the best. However, an average listener can clearly hear the different sections as the piece progresses. The piece is divided into six sections with a short interlude between the fourth and fifth section and is split up as follows:

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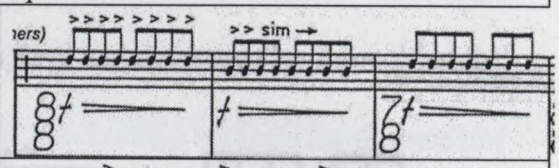
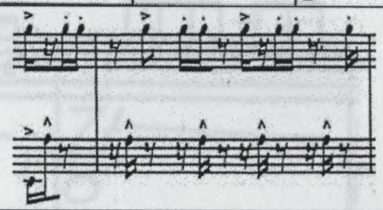
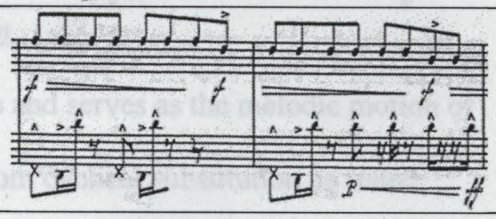
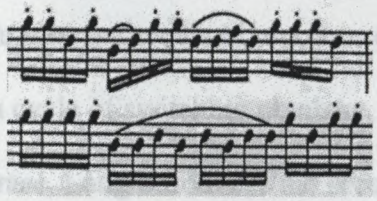
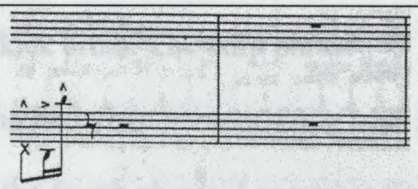
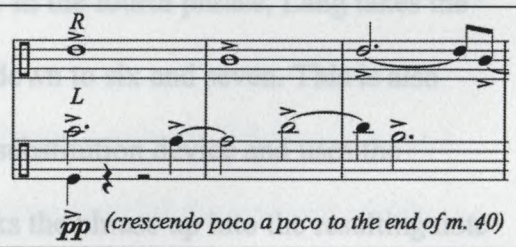
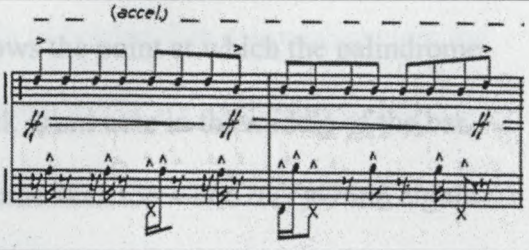
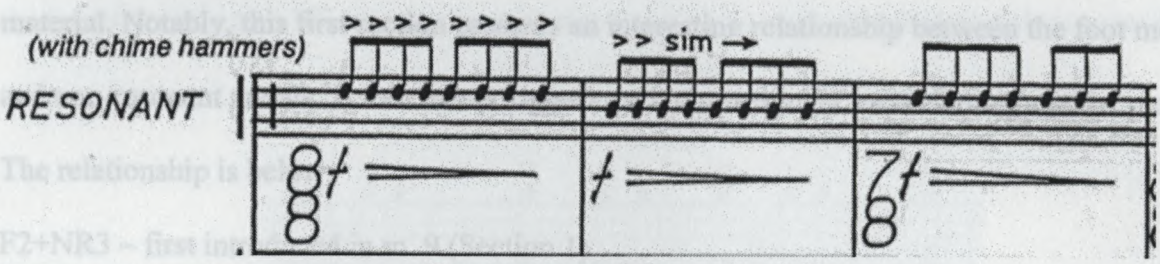
[23] Kevin Lewis, *Form, Rhythm, and Process in David Lang's The Anvil Chorus*. (University of Akron School of Music), Internet; accessed 23 Aug., 2013.
[24] Colin Tribby and Alex Postelnek, "David Lang's The Anvil Chorus," Percussive Notes 45.1 (2007), p. 67.
[25] Kevin Lewis, *Form, Rhythm, and Process in David Lang's The Anvil Chorus*. (University of Akron School of Music), Internet; accessed 23 Aug., 2013.
[26] Thomas Roland, *David Lang's The Anvil Chorus: A Performer's Analysis*. (New York: Stony Brook University), p. 4.
[27] Andrew Bliss, *David Lang: Deconstructing a Constructivist Composer*. (Ann Arbor, MI: ProQuest, 2008), p. 37.

Formal Analysis Synopsis		
Section 1 m. 1-56	Most significant use of the alternating resonant metals. Serves as the melodic motion of the piece.	
Section 2 m. 57-113	Foot metal and non-resonant metal combinations trigger different sixteenth-note groupings to create metrical superimposition. Wood blocks maintain the underlying tempo.	
Section 3 m. 114-133	Features previous material and mixes it together to create a rock-based groove. Resonant metals return in its melodic form.	
Section 4 m. 134-146	Slower. Repetition of thematic material from before in a more complex way. Rock-based groove with wood blocks as primary line with interspersed resonant metals.	
Interlude m. 147-154	Marked predominantly by silence. Includes small fragments of previous themes.	
Section 5 m. 155-198	Much faster. Increased complexity with thematic material: alternating sixteenths between non-resonant and resonant metals and foot metal interjections. Large contrast in volume.	
Section 6 m. 199-218	Suddenly a lot slower. Initial resonant metal theme returns. Foot metal and non-resonant metal combinations return. Kick drum ostinato is notated every five eighth-notes. *Accelerando* to the end.	

Section 1 spans the first 56 measures of the piece and sets the tempo at 216 bpm for each eighth note. There are six phrases total – 3 eight-measure phrases, 2 eleven-measure phrases (one with a 2 measure codetta), and 1 eight-measure phrase to finish off the section. The three

beginning phrases (A, A', and A") feature alternating 8/8 and 7/8 measures by the second and third resonant metals (R2 and R3). Each measure begins *forte* and decrescendos throughout the

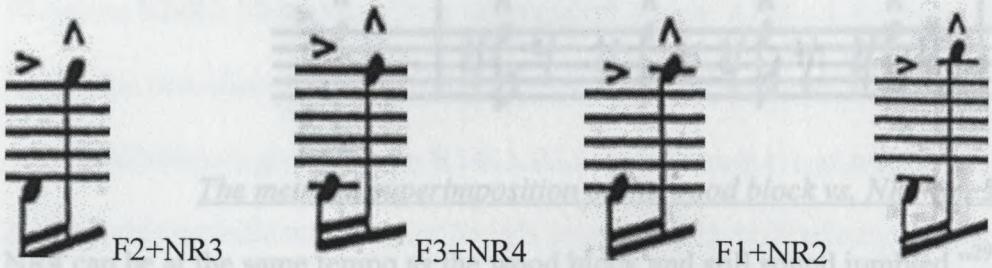


Resonant metal theme (m. 1-3)

bar. This is the most significant use of the resonant metals and serves as the melodic motion of the piece. The make-up of these alternating bars comes from cyclical substitution as stated earlier. If each eight-measure phrase is divided into two-bar phrases, we see that Lang uses every combination of 8 and 7 eighth notes: 88-78-87-77. Lang uses a cycle of switching numbers, which results in all combinations being used. In the second phrase, Lang introduces the second foot metal (F2), the third non-resonant metal (NR3), and the kick drum. The third phrase introduces F3 and NR4. The fourth phrase is a variation on the first three phrases. Lang adds R1 to make a R1-R2-R3 melodic pattern until the last phrase. In the fourth phrase, Lang takes the original seven- and eight-note phrases and reduces them down to six and seven. This is also where he introduces F1 and NR2. He breaks the cyclical substitution device and uses the palindrome as the foundation of the measures. Lang breaks the phrase up into the resulting note groupings: 77767(7)76777. The seven in parentheses shows the point at which the palindrome turns back on itself. This point is also signaled with a kick drum note in the middle of the bar. The fifth phrase is reduced even further within a palindrome skeleton – 66676(7)67666 eighth-note groupings – and includes a two-measure codetta. Again the bar where the palindrome turns back on itself features a kick drum note in the middle of the bar. The codetta may seem like two arbitrary measures, but it functions to cycle the resonant metals back to its original theme with

R2 and R3 in the sixth and final phrase of the section. This final phrase features the exact same resonant metal groupings as the first three phrases with the bottom staff containing different material. Notably, this first section presents an interesting relationship between the foot metals and non-resonant metals. A foot metal triggers each non-resonant metal throughout the piece. The relationship is below:

F2+NR3 – first introduced in m. 9 (Section 1)
F3+NR4 – first introduced in m. 18 (Section 1)
F1+NR2 – first introduced in m. 25 (Section 1)
F4+NR1 – first introduced in m. 94 (Section 2)

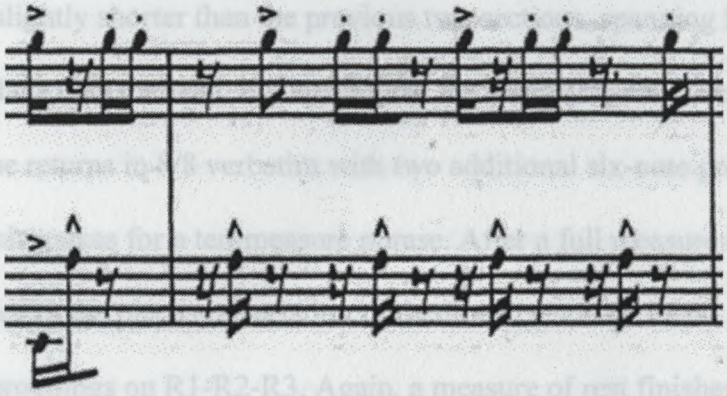


In Section 1, after the pairings are introduced, the non-resonant metals serve as interjections to the melodic resonant metal. Over the course of learning this section, one must be able to effectively exaggerate the resonant metal expressions while focusing on the foot metal and non-resonant metal interjections.

Section 2 begins in m. 57 and ends in m. 133 and features only the 8/8 time signature with eighth- and sixteenth-note values only. If the first section contains the resonant metals in a prominent role, the non-resonant fulfill the significant role in Section 2 in conjunction with the wood blocks. The non-resonant metals, triggered by the foot metals, are assigned a sixteenth-note grouping and alternate between groupings within one or two measures. The groupings are:

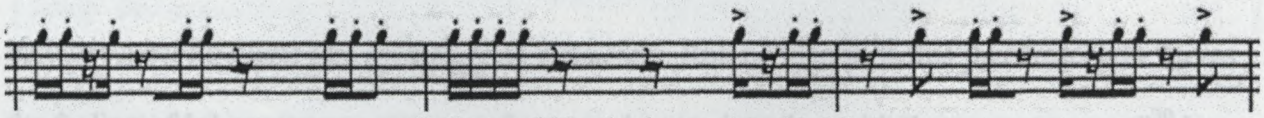
F2+NR3 sounds every five sixteenth notes – first introduced in m. 57
F3+NR4 sounds every four sixteenth notes – first introduced in m. 58
F1+NR2 sounds every three sixteenth notes – first introduced in m. 69
F4+NR1 sounds every six sixteenth notes – first introduced in m. 94

The resulting quarter-note tempos from these groupings are as follows: WB=108, NR4=108, NR3=86.4, NR2=144, NR1=72.[28] Additionally, while the NR4 tempo is 108 to the quarter note, the foot metal triggers NR4 on the downbeat in most cases so the implied downbeat actually occurs a sixteenth note off of the actual downbeat. As Roland put it, "this is why the



The metrical superimposition of the wood block vs. NR4 (m. 58-59)

NR4 can be at the same tempo as the wood block and still sound jumbled."[29] This is heard and labeled as metrical superimposition. The wood block rhythms in the right hand outline six separate phrases and are easier to see on the page. Lang takes a three-measure phrase (x) and repeats it with additional measures in each iteration much like the layered non-resonant groupings. The first phrase has four additional measures, the second adds five measures, the third adds six measures, the fourth adds seven measures, the fifth adds eight measures, and the final sixth phrase adds nine measures. Additionally, in most cases, the return of the x theme is marked



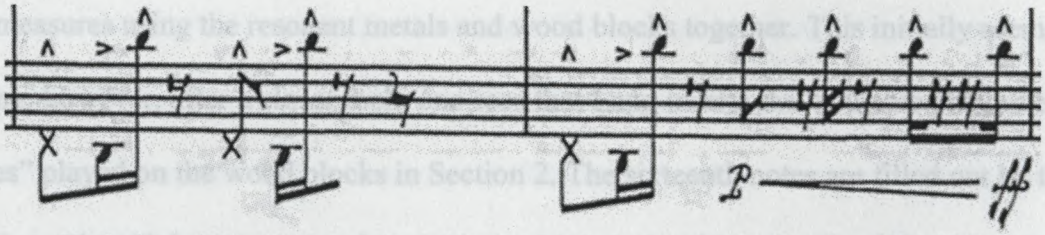
"x" wood block phrase (m. 64-66)

by a sixteenth-note pick-up in the higher woodblock with the number of additional measures in the phrase. Due to its rhythmic complexity, one must be able to separate the bottom and top

[28] Thomas Roland, *David Lang's The Anvil Chorus: A Performer's Analysis*. (New York: Stony Brook University), p. 9.
[29] Ibid., p. 11.

staves into separate parts before layering them together. Highlighting and/or noting the sixteenth groupings with phrase markings aids the performer a lot as well. These suggestions are especially useful in the learning process, as the performer understands the functions separately and compositely as well as visually sees the relationships.

Section 3 is slightly shorter than the previous two sections, spanning from m. 114-133. Lang does not introduce new material, but alters what has already been introduced. The first resonant metal phrase returns in 8/8 verbatim with two additional six-note groupings (88-78-87-77/66) on R2-R3. This makes for a ten-measure phrase. After a full measure of rest in the right hand – the first silence in the piece – a variation of the fourth resonant metal phrase returns with 77767776766-note groupings on R1-R2-R3. Again, a measure of rest finishes off the section. Beneath this melodic material lies Lang's groove-based rock influence with a kick drum and F4+NR1 combination.



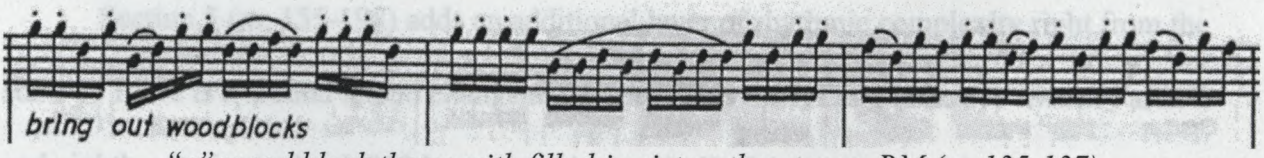
Kick drum/F4+NR1 combo w/ 3 sixteenth-note polyrhythm (m. 124-125)

Interestingly, Lang more or less maintains the every six sixteenth-note grouping idea from Section 2. Either that or Lang reduces the grouping to every three sixteenth notes, which also includes a *subito piano* and *crescendo* to *fortissimo*. Roland mentions that this crescendo "gives the feeling of [a] new tempo rising up from nowhere to interfere with the current tempo."[30] Lang also uses rhythmic displacement with this motive, placing the initial combination attack on the downbeat and subsequent attacks on one each of the remaining eighth notes in the measure,

[30] Thomas Roland, *David Lang's The Anvil Chorus: A Performer's Analysis*. (New York: Stony Brook University), p. 12.

however, not in order. This bottom phrase lines up with the top phrase and ends after ten measures. The next ten measures are a direct repeat from m. 114. The learning curve for this section is a bit quicker since there are fewer layers added than before. Like the first section, one must be able to effectively execute the resonant metal expressions while bringing out the kick drum and F4+NR1 rhythmic cells. It is especially important to practice the decrescendo in the right hand and the polyrhythmic crescendo in the left hand simultaneously.

Section 4 at measure 134 marks the first tempo change in the piece. However, the indication only says "Slower," accounting for the fact that performers may have a considerably more difficult time learning and performing this section. Lang recycles content in this section in a much more complicated way. But first Lang uses the same exact bottom staff material from m. 114-147 at m. 135 with the exception of an additional recurrence of the kick drum and F4+NR1 motive in m. 144, beat 2. The top staff includes a long stream of continuous sixteenth notes for twelve measures using the resonant metals and wood blocks together. This initially seems confusing, however, after a closer look, one sees that Lang inserts the "x theme plus nine measures" played on the wood blocks in Section 2. The sixteenth notes are filled out by the resonant metals and do not seem to have any notable relationship or pattern. The wood block



"x" wood block theme with filled-in sixteenth notes on RM (m. 135-137)

notes are noticeably different in the score in that Lang either adds a staccato mark or accent to the note and he notes to bring out the woodblocks although both lines are *fortissimo*. Additionally, The resonant metals often have slur markings for two or more successive notes. Adhering to his markings makes the relationship between the resonant metals, wood blocks, and the kick drum and foot-non-resonant metal audible. This section is exponentially harder in terms

of learning since the performer is maneuvering between five instruments in the right hand, bringing out the two woodblocks, while also playing three instruments with the two foot metals and one non-resonant metal in the left hand, which features the same *subito piano* crescendo to *fortissimo* polyrhythm.

The Interlude is only eight measures. Two measures before the Interlude the bottom staff repeats the phrase from m. 114 but is abruptly interrupted by silence, providing a much-needed rest for the listener as only nine of the thirty-two beats contain sound. The phrases are divided up into 4 two-measure cells that contain fragments of previous material. Each phrase features the familiar kick drum and F4+NR1 cell from Section 3. In the first phrase no other material is present, only silence. In the second phrase there is a sixteenth-note pick-up on the high woodblock (from Section 2) into the third phrase. The third phrase mimics the first phrase. The fourth phrase begins with a seven eighth-note grouping of R2 from Section 1 then goes right into the kick drum and F4+NR1 cell on the downbeat. This section is devoid of the sonority of the previous material and may seem simple, but it requires a keen focus to choreographing this silence as to aid the silence and not interrupt it. That is, the performer must not be frantic. It should flow and naturally breathe in the silence.

Section 5 (m. 155-198) adds an additional layer of rhythmic complexity right from the start: 1) There is a second tempo change at the start. This time, Lang indicates "Much Faster" and eighth-note is at a brisk 252 beats per minute, 2) all of the resonant and non-resonant metals are mixed together and are notated as alternating sixteenth notes with accents on the beginnings of each note grouping, 3) all of the foot metals interject every so often and 4) the dynamic is marked at *piannisimo* and *crescendos poco a poco* throughout the entire section. The combination of these items makes for the most difficult section of the piece. However, the

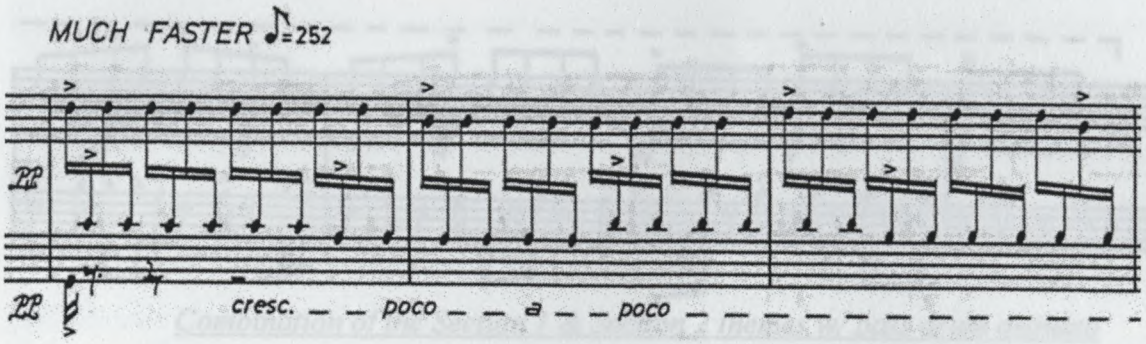
construction of the section makes it easier to understand and learn. Just like in Section 1, the resonant metal theme and variations come back following the familiar R1-R2-R3 pattern. There are two iterations of 88-78-87-77, one iteration of 77767(7)76777, and a final iteration of 88-78-87-77/664. In the bottom staff Lang develops the concept of cyclical substitution. The note groupings alter between four non-resonant metals and therefore use sets of four individual numbers for the substitution. Lang uses six- and five-note groupings between the sets. Roland best describes this manipulation:

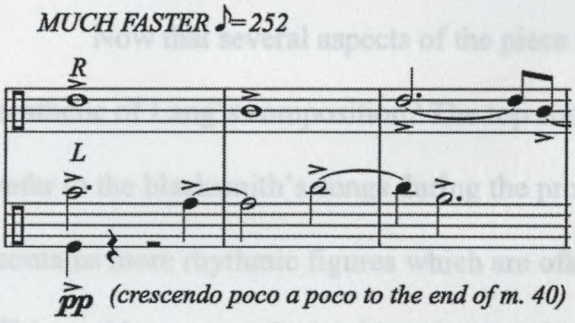
> In the initial grouping each instrument has six beats, in every subsequent phrase an instrument drops one beat to make a group of five. The five group is cycled through each instrument until all presentations of the six, six, six, five group are presented. Then two groups are shortened to five and cycled through, then three groups of five are cycled, until finally there is one presentation of an all five group. The complete beat group pattern for the non-resonant metals is:
> 6 6 6 6 5 6 6 6
> 6 5 6 6 6 6 5 6
> 6 6 6 5 5 5 6 6
> 5 6 5 6 5 6 6 5
> 6 5 5 6 6 5 6 5
> 6 6 5 5 5 5 5 6
> 5 5 6 5 5 6 5 5
> 6 5 5 5 5 5 5 5[31]

Lang executes this cycle using the non-resonant metals in this order: 2-4-1-3. Also important to note is the fact that the foot metal pairing with the non-resonant metals is discarded for this section only. Instead the foot metals are played one sixteenth-note before every return of NR2 except for the second cycle in m. 158. Practicing at slower tempos, while separating the hands and feet are the keys to success to learning this section. Only after learning them individually and slowly should one increase the tempo. To facilitate reading and comprehension, it is suggested to rewrite Section 5 and only noting the changes in instrument rather than each sixteenth note. Reading it is uncomfortable at first, however, one reads the top staff in eighth notes starting on

[31] Thomas Roland, *David Lang's The Anvil Chorus: A Performer's Analysis*. (New York: Stony Brook University), p. 16.

the beat and the bottom staff in eighth notes starting on the second sixteenth note. It is also recommended to highlight the non-resonant metals just like Section 2.

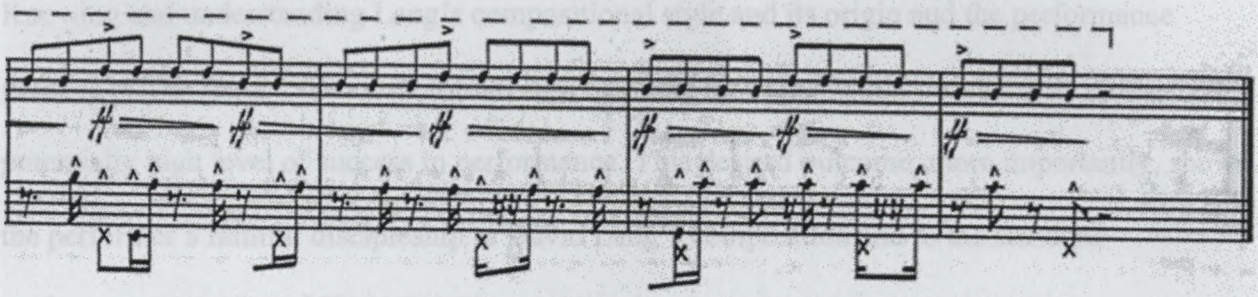




m. 155-157: left=rewrite, above=original

At Section 6 (m. 199-218), we see the final development of Lang's mathematical functions. Just like the gradual crescendo in Section 5, Lang indicates Section 6 with "suddenly a lot slower" and writes in an accelerando from m. 200 until the end. This time the dynamic remains at *fortissimo*. The top staff contains similar information to the previous section. Lang reintroduces the Section 1 theme for the last time (88-78-87-77) then takes the last six groupings and uses rhythmic diminution to finish off the top staff at the end. The diminution results contain 677666-, 566555-, and finally 455444-note groupings. The bottom staff repeats the same rhythmic combinations from Section 2, m. 57-76, and adds an additional kick drum note every five eighth-notes. This section also contains the most active foot metal passage in the piece. It will require much attention to learn the kick drum and the F+NR pairings before adding the top staff in the right hand. Interestingly, this section contains the only double stop in the piece between foot metals. Similarly to the other sections, one must work this section slowly and make

sure that the appropriate resonant metal expressions are exaggerated while the bottom staff lines remain strong and rhythmically consistent in regards to the accelerando.



Combination of the Section 1 & Section 2 themes w/ bass drum ostinato

Now that several aspects of the piece have been identified and described, what is the aesthetic of Lang's composition? The top staff is clearly more lyrical, more melodic. It could refer to the blacksmith's songs during the process of working on a project. The lower staff contains more rhythmic figures which are often fragmented andcreates contrast to the top staff. This could represent the loud interjections by the individual blacksmiths.[32] Looking a bit further out at the form of the piece, we see a possible timeline of a smithing project.

> The first section is dominated by the song with each smith slowly beginning to work at an individual pace. Section Two sees the smiths begin to work in earnest, the hammering happens more frequently but the song is neglected here… The song regains strength in Section Three and the hammering becomes more cohesive, represented by the three-eight motive and single voice. As the song becomes busier in Section Four (the running sixteenth notes) the hammering stays steady from the previous section. The Interlude represents a brief respite before the smiths push on to finish the task. Section Five sees more activity and the song becomes intertwined with the hammering, the hammering becomes a sort of song itself. The final section has the incessant hammering of section two coupled with the steady song headed for its finish. The bass drum adds the element of steady progress to bring the work to a close.[33]

While Lang incorporated concepts of blacksmithing in the composition, he probably did not intend for any programmatic interpretation.

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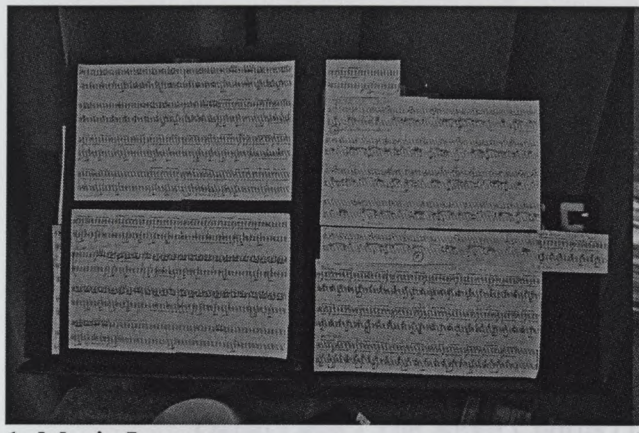
[32] Thomas Roland, *David Lang's The Anvil Chorus: A Performer's Analysis*. (New York: Stony Brook University), p. 18.
[33] Ibid.

An appropriate performance of a piece comes from a comprehensive understanding through studying the piece, the composer, the musical genre, and the historical significance. Knowing and understanding Lang's compositional style and its origin and the performance practice of *The Anvil Chorus*, its formal structure, and instrumentation problems facilitate a potentially high level of success in performance. This desired outcome, more importantly, shows the performer's faithful discipleship to David Lang's composition and to the standard performance practice of *The Anvil Chorus*.

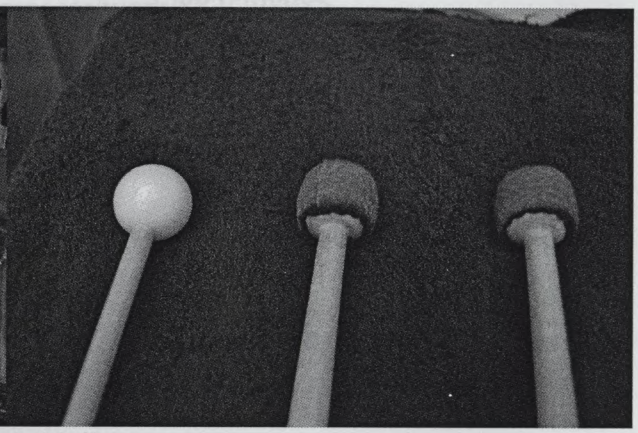
Appendix – My Set-up



1. Music Layout

2. Foot Metals

3. Non-resonant metals



4. Mallets

5. Resonant Metals and Jam Blocks

Bibliography

Berio, Luciano. *Circles.* New York City: Harcourt, Brace, 1960. Print.

Bliss, Andrew Michael. "David Lang: Deconstructing a Constructivist Composer." Order No. 3463180 University of Kentucky, 2008. Ann Arbor: *ProQuest.* Web. 23 Aug. 2013.

Coleman, Matthew. "Instrument Design in Selected Works for Solo Multiple Percussion." Order No. 3547645 Arizona State University, 2012. Ann Arbor: *ProQuest.* Web. 23 Aug. 2013.

Ferneyhough, Brian. *Bone Alphabet.* London: Peters Edition, Ltd., 1995. Print.

Lang, David. *The Anvil Chorus.* New York: G. Schirmer, Inc., 1991. Print.

_____. "David Lang - The Anvil Chorus (1991)."*Music Sales Classical*. Music Sales Classical. Web. 23 Aug 2013. <http://www.musicsalesclassical.com/composer/work/882/29898>.

Lewis, Kevin. "Form, Rhythm, and Process in David Lang's The Anvil Chorus." University of Akron School of Music. Web. 23 Aug 2013. <http://musicweb.ucsd.edu/~percussion/papers/rr_klewis.pdf>.

Roland, Thomas. *David Lang's The Anvil Chorus: A Performer's Analysis*. DMA, Stony Brook University. Stony Brook.

Schick, Steven. *The Percussionist's Art: Same Bed, Different Dreams*. Rochester, NY: University of Rochester, 2006. Print.

Tribby, Colin, and Alex Postelnek. "David Lang's 'The Anvil Chorus' A Percussionist's Guide to Blacksmithing." *Percussive Notes*. 45.1 (2007): n. page. Print.